

COMMUNITY MAPPING SYSTEM

GLOSSARY OF TERMS AND DEFINITIONS

MAP LAYERS: Refers to the data layers used to create the GIS mapping system. Data layers represent different data sets that are integrated into the mapping system, and are collected from national, state and local resources. The data layers listed below are a collection of available data from the N.C. Department of Environmental Quality (DEQ) within its divisions plus national data, census data, and other geographic and socioeconomic data collected by federal or academic institutions. Each data layer source is provided in parentheses behind the data layer name.

REGULATED FACILITIES

Aboveground Storage Tank Incidents (DEQ)

This layer represents sites where there has been a discharge (release) of petroleum to the soil and/or groundwater from a source other than an Underground Storage Tank (UST) system (i.e. Aboveground Storage Tank (AST) system, spills, dumping, etc.). Features are referred to as "incidents." This data is extracted from the Regional Aboveground Storage Tank (RAST) database. Learn more about [ASTs](#).

Air Quality Permitted Facilities (DEQ)

This layer includes all active facilities that require air permits in North Carolina. Facilities only need air permits if they meet a certain air emissions threshold. The permit type for each facility can be found in the pop-up for any facility in the Air Quality Permitted Facilities layer (see How-To Guide to learn how to view a pop-up). To learn more about the different types of air permits that DEQ regulates, visit the [Air Quality Permitting webpage](#).

Animal Operation Permits (DEQ)

This layer includes all active animal operations that are regulated under DEQ's permitting program. This does not include all animal operations across the state. For more information on what type of operations are permitted by the State of North Carolina, please visit the [Animal Feeding Operations Permit webpage](#).

Brownfields Program Sites (DEQ)

This layer is for viewing North Carolina Brownfields projects and is updated at least once a month. The Brownfields Program takes idle or abandoned properties and redevelops them into productive sites. Examples of brownfields projects include redeveloping sites into retail centers, museums, mixed-use developments and more. This data set shows the locations of North Carolina brownfields projects that have entered into the program to receive a Brownfields Agreement. The marker points shown reflect the current status of the project. Learn more about the [Brownfields Program](#).

Coal Ash Structural Fills (DEQ)

This layer shows all the known Coal Ash Structural Fills (CCB) in North Carolina. Data on these facilities comes from the DEQ's Solid Waste Section and Division of Water Resources databases. These are not permitted coal ash landfills; these are the known locations where coal ash was used as a structural fill material under the applicable state rules. See *Permitted Solid Waste Landfills (Open and Closed)* layer for information about currently permitted coal ash landfills. Learn more about [Structural Fills](#)

Contaminated Dry-Cleaning Sites (DEQ)

This layer shows the address, status and prioritization information for sites that have been certified into the North Carolina Dry-Cleaning Solvent Cleanup Act (DSCA) Program. The Act established a fund to assess and clean up dry-cleaning solvent contamination at dry-cleaning and wholesale distribution facilities, and it authorized the Program to develop and enforce rules to prevent dry-cleaning solvent releases at operating facilities. Learn more about the [DSCA Program](#).

Federal Remediation Branch (DEQ/EPA)

The Federal Remediation Branch works with the U.S. Environmental Protection Agency to administer the federal Superfund program under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended. The branch helps the EPA distribute its resources to sites with the worst contamination or sites that need immediate emergency actions. Click on the links beside "EPA Info" and "Documents" in the pop-up window of each Federal Remediation Branch point on the map to learn more about that specific Superfund site. Learn more about the [Federal Remediation Branch](#).

Hazardous Waste Sites (DEQ/EPA)

This layer represents the locations of North Carolina sites that are regulated by the hazardous waste provisions of the Resource Conservation and Recovery Act (RCRA). This includes Large Quantity Generators, Small Quantity Generators, Transporters of Hazardous Waste, permitted treatment, storage or disposal (TSD) facilities and TSD facilities that are under an Order or a Consent Agreement. (Note: facilities that are Conditionally Exempt Small Quantity Generators may also be included if they are also a Transporter or TSD facility.) The data is from the EPA RCRA Info database. The State of North Carolina, Division of Waste Management, Hazardous Waste Section is the implementer of record (agency responsible for data entry) for this data. Learn more about the [Hazardous Waste Section](#).

Inactive Hazardous Sites (DEQ)

This layer represents hazardous substance spill and disposal sites (as points), and includes active and inactive facilities and a variety of property types. These sites include historic and any recent accidental releases of hazardous substances and, where present in or threatening groundwater, other contaminants. The term "inactive" refers to the fact

that cleanup was inactive at large numbers of sites at the time of program enactment. This data set includes closed remediation sites that have land use restrictions recorded as part of the remedy. Learn more about the [Inactive Hazardous Sites Program](#).

Land Clearing and Inert Debris (LCID) Notifications (DEQ)

This layer reflects all the Land Clearing and Inert Debris (LCID) Landfill Notification facilities (fewer than two acres in size) in North Carolina. Land clearing and inert debris includes yard waste, trees, limbs, stumps, branches and untreated or unpainted wood. The DEQ Solid Waste Section regional staff must be contacted to approve selected temporary sites for debris storage, staging and processing. Learn more about [LCID guidelines](#).

Land Use Restriction and/or Notices (DEQ)

This layer shows locations of sites or projects managed by the Division of Waste Management (DWM) that have a Notice and/or Land Use Restrictions recorded at a local register of deeds office. The location data is a combined collection from eight sections or programs operating within DWM. The Notice and/or Land Use Restrictions are subject to one of the following North Carolina General Statutes:

1. Notice of Open Dump; [G.S. §130A-301\(f\)](#)
2. Notice of Inactive Hazardous Substance or Waste Disposal Site; [G.S. §130A-310.8](#)
3. Notice of Brownfields Property; [G.S. §130A-310.35](#)
4. Notice of Oil or Hazardous Substance Discharge Site; [G.S. §143-215.85A](#)
5. Notice of Dry-Cleaning Solvent Remediation; [G.S. §143-215.104M](#)
6. Notice of Contaminated Site; [G.S. §143B-279.10](#)
7. Notice of Residual Petroleum; [G.S. §143B-279.11](#)
8. Notice of Residual Contamination; [G.S. §130A-310.71\(e\)](#)

Mining Site Locations (DEQ)

This layer shows all the known active, inactive, and released mining sites since 1971. Data on these facilities comes from the DEQ's Mining Program's database. An active site is a site that has a Mining Permit which includes both a reclamation plan and has securities deposited with the program to ensure the reclamation plan is completed. An inactive site is a site that has a valid permit, but the permittee has notified the Mining Program the site is inactive. A released site is a site which has been reclaimed in accordance to the site's permit and has been released from the obligations of the site's mining permit. Learn more about the [Mining Program](#).

North Carolina Census Block Groups (U.S. Census)

Census block groups are small, relatively permanent geographic entities within census tracts. Census block groups fall between census blocks and census tracts in size. Generally, census tracts have between 600 and 3,000 residents. The census block group is the smallest geographical unit for which the U.S. Census Bureau publishes the

demographic data that is integrated within the Community Mapping System. Learn more about how the U.S Census [determines census block groups](#) and how the U.S Census [defines all of its geographical boundaries](#).

N.C. One Map Parcels (N.C. Parcels Transformer)

Parcels represent property boundaries. The **N.C. Parcels Transformer** collects parcel data from all 100 North Carolina counties and the Eastern Band of Cherokee Indians into a standardized data set for display and analysis across county boundaries. The grant project, funded by the EPA, created an efficient platform that has been expanded to a statewide parcel data resource.

NPDES Stormwater Permits (DEQ)

This layer reflects all National Pollutant Discharge Elimination System Program (NPDES) permits, which apply to numerous broad categories of industrial activities with potential stormwater discharges (runoff), that are permitted through the DEQ Stormwater Program. During rain and snowmelt events, stormwater runoff is generated when water flows over land or impervious surfaces, such as paved streets, parking lots and building rooftops, and does not soak into the ground. Learn more about the stormwater permitting program under the Division of Energy, Mineral and Land Resources on the [Stormwater Program webpage](#).

NPDES Wastewater Treatment Facility Permits (DEQ)

This layer reflects all wastewater treatment facilities with an NPDES permit in North Carolina. All wastewater discharges to surface waters in North Carolina must obtain a permit to control water pollution. The federal Clean Water Act of 1972 placed strict regulations on wastewater discharges and gave wastewater discharge enforcement responsibilities to the EPA. The EPA then created the NPDES to track and control point sources of pollution. Learn more about the [NPDES Wastewater program here](#).

Permitted Solid Waste Landfills (Open and Closed) (DEQ)

This layer reflects all active or closed, but permitted Municipal Solid Waste landfills (MSW), Construction and Demolition landfills (CDLF), Land-Clearing and Inert Debris (LCID) Demolition (older facilities) landfills, Coal Ash landfills (STRUC) and Tire landfills (TIRE). Learn more about the [Solid Waste program](#).

Petroleum Contaminated Soil Remediation Permits (DEQ)

This data layer represents sites that have received a permit or Certificate of Approval from the state's Underground Storage Tank (UST) Section under the Petroleum-Contaminated Soil Remediation Permit Program. Petroleum-contaminated soil is any soil that has been exposed to petroleum by any means, including any emission, spillage, leakage, pumping, pouring, emptying or dumping of petroleum products onto or under the land surface, that

shows characteristics or concentrations of typical petroleum components that are detectable by approved analyses. Learn more about the [petroleum cleanup process](#).

Pre-Regulatory Landfill Sites (DEQ)

This layer shows pre-regulatory, non-industrial landfills that stopped accepting waste before 1983, when waste disposal permitting began. The Inactive Hazardous Sites Branch in DEQ conducts the assessment and remediation of these sites under its Pre-Regulatory Landfill Program. Local governments may conduct the assessment work and seek reimbursement of expenses if the work was pre-approved by the Branch. The Inactive Hazardous Sites Branch is located in the Superfund Section of the Division of Waste Management. Learn more about the [Hazardous Sites Program](#).

Solid Waste Septage Sites (DEQ)

This layer reflects all active and permitted Septage Land Application Site (SLAS) and Septage Detention and Treatment Facility (SDTF) sites in North Carolina. Septage is a fluid mixture of untreated and partially treated sewage solids, liquids and sludge of human or domestic origin that is removed from a septic tank system. The state's Septage Management Program is responsible for ensuring that septage is managed in a responsible, safe and consistent manner across the state. Learn more about [SLAS and SDTF](#).

Tribal Boundaries (U.S. Census)

This layer is provided by the U.S. Census and includes federally-recognized American Indian reservations and off-reservation trust land areas, along with state-recognized American Indian reservations. Learn more about [TIGER/LINE tribal layers](#) from the Census. Learn more about the [eight state-recognized American Indian tribes in North Carolina](#).

Underground Storage Tank Active Facilities (DEQ)

This layer represents the geographic locations of active, registered UST facilities. Features are referred to as "facilities." This data is extracted from the Tank Inventory Management System (TIMS) database. Learn more about [USTs](#).

Underground Storage Tank Incidents (DEQ)

This layer represents sites where there has been a release of petroleum to the soil and/or groundwater from an UST system. Features are referred to as "incidents" when an incident number has been assigned. This data is extracted from the Regional Underground Storage Tank (RUST) database. Learn more about [USTs](#).

DEMOGRAPHICS

All demographic data comes originally from the U.S. Census American Community Survey (ACS). The raw data that is utilized in the DEQ Community Mapping System is

currently hosted by the EPA in their EJSCREEN division. The American Community Survey is distributed by the U.S. Census Bureau every year between the decennial (every 10 years) census to accurately estimate population changes from year to year. This data layer will be updated as new survey versions are released. All definitions are provided by the U.S. Census Bureau. At the launch of this mapping system, demographic data is from the 2017 ACS five-year estimates. Learn more about the [American Community Survey](#) and learn [more about definition of terms](#).

Potentially Underserved Block Groups (2019 ACS Data)

On the U.S. Census Block Group level, the data for Poverty and Race and Ethnicity were overlaid on the map of North Carolina. If the NC DEQ definition of Underserved Communities was met (meaning the following criteria was present in the block group), the block group was selected. This criteria for the block group was compared to both the County and the State. It is selected as a potentially underserved block group if it meets the following criteria for Race/Ethnicity and Poverty:

Racial/Ethnic composition:

Share of nonwhites and Hispanic or Latino (of any race) is over fifty percent **OR**

Share of nonwhites and Hispanic or Latino (of any race) is at least ten percent higher than County or State share.

AND

Poverty rate:

Share of population experiencing poverty is over twenty percent **AND**

Share of households in poverty is at least five percent higher than the County or State share.

This dataset is a selection of the 2019 ACS data from the data tables B03002—Hispanic or Latino Origin by Race—and S1701—Poverty Status in the Past 12 Months. Learn more about [NC DEQ's Potentially Underserved Block Groups 2019 - Overview \(arcgis.com\)](#).

Dependent Populations (EPA/U.S. Census Bureau)

Dependent populations are determined by age data collected by the ACS. Dependent populations refer to those younger than 5 years of age and those older than 64 years of age.

Educational Attainment (EPA/U.S. Census Bureau)

Educational attainment refers to the highest level of education that an individual has completed. This is distinct from the level of schooling that an individual is enrolled in.

Hispanic or Latino (EPA/U.S. Census Bureau)

The data on the Hispanic or Latino population were derived from answers to a question that was asked of all people (Question 5 in the 2017 American Community Survey (ACS)). Hispanics or Latinos who identify with the terms “Hispanic,” “Latino” or “Spanish” are those who classify themselves in one or more of the specific Hispanic, Latino or Spanish categories listed on the questionnaire (“Mexican,” “Puerto Rican” or “Cuban”) as well as those who indicate that they are “another Hispanic, Latino or Spanish origin.”

Homeowner Status (EPA/U.S. Census Bureau)

A unit is "owner occupied" if the owner or co-owner lives in the unit, even if it is mortgaged or not fully paid for. All other occupied units are classified as "renter occupied," including units rented for cash rent and those occupied without payment of cash rent.

Limited English Speaking Households (EPA/U.S. Census Bureau)

This variable identifies households that may need English-language assistance. A "Limited English speaking household" is one in which no member 14 years old and over (1) speaks only English at home or (2) speaks a language other than English at home and speaks English "very well."

Median Income (EPA/U.S. Census Bureau)

The median divides the income distribution into two equal parts: one-half of the cases falling below the median income and one-half above the median. For households and families, the median income is based on the distribution of the total number of households and families including those with no income. The median income for individuals is based on individuals 15 years old and over earning income. Median income for households, families, and individuals is computed on the basis of a standard distribution.

Non-Hispanic American Indian (EPA/U.S. Census Bureau)

A person having origins in any of the original peoples of North, Central or South America and who maintains tribal affiliation or community attachment, and who does not identify as Hispanic. This category includes people who indicate their race as “American Indian or Alaska Native” or report entries such as Navajo, Blackfeet, Inupiat, Yup’ik or Central American Indian groups or South American Indian groups.

Non-Hispanic Asian (EPA/U.S. Census Bureau)

A person having origins in any of the original peoples of East Asia, Southeast Asia or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand and Vietnam, and does not identify as Hispanic. It includes people who indicate their race as “Asian Indian,” “Chinese,” “Filipino,” “Korean,” “Japanese,” “Vietnamese” and “Other Asian” or provide other detailed Asian responses.

Non-Hispanic Black or African American (EPA/U.S. Census Bureau)

A person having origins in any of the Black racial groups of Africa. It includes people who indicate their race as “Black or African American”, or reports entries such as African American, Kenyan, Nigerian or Haitian, and who does not identify as Hispanic.

Non-Hispanic Hawaiian or Other Pacific Islander (EPA/U.S. Census Bureau)

A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. It includes people who indicate their race as “Native Hawaiian,” “Guamanian or Chamorro,” “Samoan,” and “Other Pacific Islander” and who does not identify as Hispanic.

Non-Hispanic White (EPA/U.S. Census Bureau)

A person having origins in any of the original peoples of Europe, the Middle East or North Africa. It includes people who indicate their race as “White” or report entries such as Irish, German, Italian, Lebanese, Arab, Moroccan or Caucasian and who does not identify as Hispanic.

Per Capita Income (EPA/U.S. Census Bureau)

Per capita income is the mean income computed for every man, woman, and child in a particular group including those living in group quarters. It is derived by dividing the aggregate income of a particular group by the total population in that group.

ENVIRONMENTAL LAYERS**North Carolina Effective Flood Zones (North Carolina Department of Public Safety-Emergency Management)**

This layer represents the areas within the flood mapping boundaries defined by engineering models for the 100-year, 500-year flood plains and floodway as well as the stream centerline.

North Carolina Natural Heritage Program Managed Areas (NC Natural Heritage¹)

The North Carolina Natural Heritage Program's Managed Areas are a collection of properties and easements where natural resource conservation is one of the primary management goals.

HEALTH

All health rates are measured in people per **100,000** unless otherwise specified. For example: if the rate of heart disease in a census tract is 125, that means that 125 out of every 100,000 people may have heart disease in that census tract on average. **All health data is represented on a county level because it is the smallest scale of data available.**

Asthma Hospitalization (NCDHHS)

This layer shows the most recent rates of hospital discharges with a primary diagnosis of asthma per county. Asthma hospitalization data has not been updated by N.C. DHHS since 2014². DEQ houses this GIS layer using DHHS data, and will be manually updating asthma hospitalization data as new information becomes available.

Cancer (NCDHHS)

This layer shows cancer deaths and includes the average deaths caused by different types of cancer that were then averaged together for a total. Mortality rates are derived from information collected from North Carolina resident death certificates. The death rates are age-adjusted, calculated using the projected United States 2000 population as the standard.

Cardiovascular Disease (NCDHHS)

This layer shows cardiovascular disease deaths and includes all resident deaths where heart disease was coded as the underlying (primary) cause of death. Mortality rates are derived from information collected from North Carolina resident death certificates. The death rates are age-adjusted, calculated using the projected United States 2000 population as the standard.

Child Mortality Rate (NCDHHS)

This reflects the rate of deaths of children ages 0-17. Mortality rates are derived from information collected from North Carolina resident death certificates.

¹ North Carolina Natural Heritage Program. 2020. Biotics Database. Division of Land and Water Stewardship. Department of Natural and Cultural Resources, Raleigh, North Carolina.

² The Center for Disease Control funding for the NC asthma program was discontinued in 2014.

Diabetes (NCDHHS)

This data layer shows diabetes deaths and includes all resident deaths where diabetes mellitus (diabetes) was coded as the underlying (primary) cause of death. Mortality rates are derived from information collected from North Carolina resident death certificates. The death rates are age-adjusted, calculated using the projected United States 2000 population as the standard.

Heart Disease (NCDHHS)

This data layer shows heart disease deaths and includes all resident deaths where heart disease was coded as the underlying (primary) cause of death. Mortality rates are derived from information collected from North Carolina resident death certificates. The death rates are age-adjusted, calculated using the projected United States 2000 population as the standard.

Infant Death Rate (NCDHHS)

This data layer represents the number of infant deaths per 1,000 live births. Infant death measures the number of infants who died fewer than 365 days after birth.

Preterm Birth Rate (NCDHHS)

This data layer represents the number of infants born at fewer than 37 weeks of gestation (pregnancy), based on the clinical/obstetric estimates of gestation. Data is the average from 2011 to 2015 by county. Information was collected from the North Carolina resident live birth certificate files.

Primary Care Physicians (NCDHHS)

This data layer represents the number of primary care physicians per 10,000 residents. Primary care physician numbers include those who are active in the profession and those with unknown activity status, but inactive physicians are not included. Primary care physicians are those who indicate a primary specialty of family practice, general practice, internal medicine, pediatrics or OB/GYN.

Stroke (NCDHHS)

This data layer shows stroke deaths and includes all resident deaths where cerebrovascular disease (stroke) was coded as the underlying (primary) cause of death. Mortality rates are derived from information collected from North Carolina resident death certificates. The death rates are age-adjusted, calculated using the projected United States 2000 population as the standard.

SENSITIVE RECEPTOR LAYERS**Hospitals (NC OneMap)**

The location of all hospitals in North Carolina including those licensed by the state, free standing emergency departments, Veteran's Affairs (VA) hospitals, military hospitals, psychiatric, and other specialty hospitals.

Nursing Homes (NC OneMap)

This layer includes the locations of facilities commonly referred to as a nursing home but may also be called skilled nursing facilities, long term care (LTC) facilities, rest homes, or other standardized name throughout the United States. A nursing home traditionally offers 24-hour (skilled) nursing to the elderly or to disabled patients having a variety of medical conditions who require personal care services above that of an assisted living facility, but do not require hospitalization. For purposes of this dataset, an assisted living facility is defined as a facility where the elderly, who are not related to the operator, reside and receive care, treatment, or services.

Non-Public Schools (NC OneMap)

The North Carolina Department of Administration's State Property Office developed the digital Non-Public Schools data from addresses provided Department's Division of Non-Public Education. It includes all schools not classified as public schools.

Places of Worship (Homeland Infrastructure Foundation-Level Data Subcommittee)

The Places of Worship dataset is composed of any type of building or portion of a building that is used, constructed, designed, or adapted to be used as a place for religious and spiritual activities. These facilities include, but are not limited to, chapels, churches, mosques, shrines, synagogues, and temples.

Public Schools (NC OneMap)

This dataset is an updated version of the 2008 dataset containing all public school locations in North Carolina and their classification as Pre-K, Elementary, Middle, High, or Early College schools.